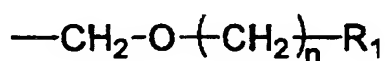


CLAIMS

1. A polymer compound comprising:
an alkali soluble group (i), wherein

5 at least one hydrogen atom of the alkali soluble group (i) is substituted by an
acid dissociable, dissolution inhibiting group (ii) represented by a general formula (1):



(1)

(wherein R₁ represents a cycloaliphatic group which contains no more than 20
carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a
10 halogen atom, and n represents 0 or an integer of 1 to 5.), and
the polymer compound exhibits changed alkali solubility under the action of an
acid.

2. A polymer compound according to claim 1, wherein the alkali soluble group (i)
15 is at least one selected from an alcoholic hydroxyl group, a phenolic hydroxyl group, or a
carboxyl group.

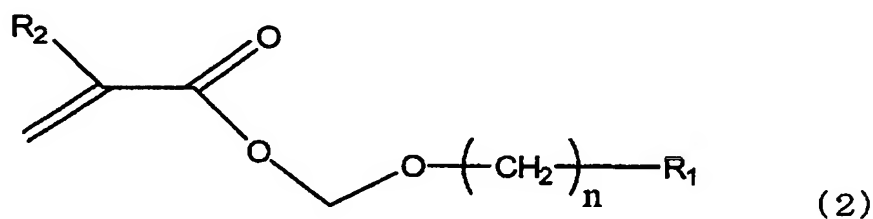
3. A polymer compound according to claim 2, wherein a carbon atom adjacent to
the carbon atom bonded to the alcoholic hydroxyl group is bonded to at least one fluorine
20 atom.

4. A polymer compound according to claim 1, wherein the cycloaliphatic group
contains an adamantane backbone.

5. A polymer compound according to claim 1, wherein R_1 represents the cycloaliphatic group containing at least one hydrophilic group.

5 6. A polymer compound according to claim 1, wherein the hydrophilic group is at least one selected from the group consisting of a carbonyl group, an ester group, an alcoholic hydroxyl group, ether, an imino group, and an amino group.

7. A compound represented by a general formula (2):

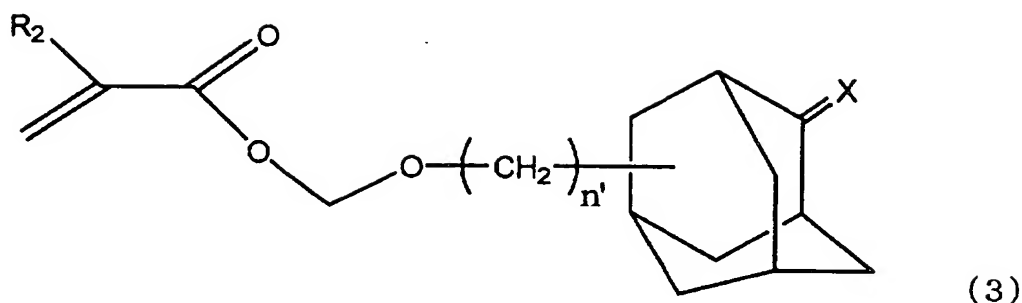


10

(wherein R_1 represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom; n represents 0 or an integer of 1 to 5; and R_2 represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms.).

15

8. A compound according to claim 7, represented by a general formula (3):



(wherein R_2 represents the same as the aforementioned, X represents two hydrogen atoms or an oxygen atom, and n' represents 0 or 1.).

5 9. A polymer compound according to claim 1, comprising a structural unit (a1) derived from the compound according to claim 7.

10. A polymer compound according to claim 1, comprising a structural unit (a1) derived from the compound according to claim 8.

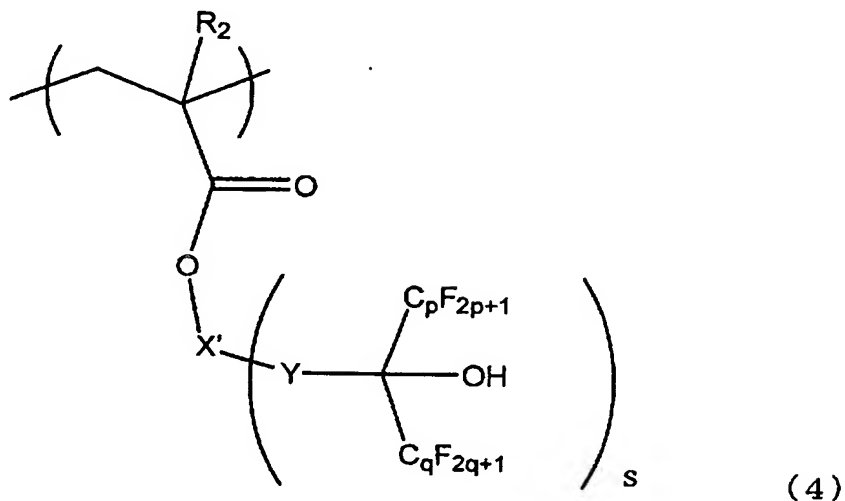
10

11. A polymer compound according to claim 9, further comprising a structural unit (a3) derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

15 12. A polymer compound according to claim 11, wherein the structural unit (a3) comprises at least two mutually different structural units derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

13. A polymer compound according to claim 11, further comprising a structural unit
20 (a4) derived from (meth)acrylate containing a polar group-containing polycyclic group.

14. A polymer compound according to claim 9, further comprising a structural unit (a6) represented by a general formula (4):



- 5 (wherein R_2 represents the same as the aforementioned, X' represents a divalent or trivalent cyclic group, Y represents an alkylene or alkyleneoxy group containing 1 to 6 carbon atoms which is divalent, p and q independently represent an integer of 1 to 5, and s represents an integer of 1 or 2.).

- 10 15. A photoresist composition comprising:
 a base material resin component (A) which exhibits changed alkali solubility under the action of an acid; and
 an acid generator component (B) which generates the acid on exposure to radiation, wherein
 15 the base material resin component (A) is the polymer compound according to any one of claims 1, 9, or 10.

16. A photoresist composition according to claim 15, further comprising a nitrogen-containing organic compound (D).
17. A resist pattern formation method comprising:
- 5 forming a photoresist film on a substrate using the photoresist composition according to claim 15;
- exposing the photoresist film; and
- developing the exposed photoresist film to form a resist pattern.